SEQUENCE LISTING

<110> EISAI CO., LTD. <120> Novel gene participating in epidermal differentiation and use thereof <130> E1-A0208P <150> 2004-03-02 <151> JP 2004-057559 <160> 53 <170> PatentIn version 3.1 <210> 1 <211> 661 <212> DNA <213> Mus musculus <220> **<221>** CDS **<222>** (23).. (337) <223> <400> 1 ctgactgtac gagagcacaa cc atg aaa cca gtc acg gcc tct gct ctg ctg **52** Met Lys Pro Val Thr Ala Ser Ala Leu Leu 5 10 1 ctt atc ctg ctg ggt gtg gcc tgg cgt gga gac agc cac agc tgg ggt 100 Leu lle Leu Gly Val Ala Trp Arg Gly Asp Ser His Ser Trp Gly 15 20 25 tca gat ctg tca tct ctg cag aag agg gca ggt gga gct gac cag ttt 148 Ser Asp Leu Ser Ser Leu Gln Lys Arg Ala Gly Gly Ala Asp Gln Phe

35

40

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GIn	Lys	Arg 35	Ala	Gly	Gly	Ala	Asp 40	GIn	Phe	Ser	Lys	Pro 45	Glu	Ala	Arg	
Gln	Asp 50	Leu	Ser	Ala	Asp	Ser 55	Ser	Lys	Asn	Tyr	Tyr 60	Asn	Asn	Gln	Gin	
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Ala	Gly	Val	Thr	Pro 85	Ser	Ser	Ser	Ser	Ala 90	Ser	Arg	Ala	GIn	Pro 95	Gly	
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Met Lys Leu

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Cag	ggc	tet	ctø	gcc	tøc	ctc	ctø	cta	acc	cta	tot	cta	aat	aat	ggg	226
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UIII	5	361	LGU	Ala	Uys	10	Leu	Leu	МІА	LGU	15	ren	uly	чіу	ч	
	J					10					13					
ac a	σo+	220	000	o+«	000	o at	~~~	~~~	<i>«»</i>	~~ 0	000	~~~	~~~	o. ##	ant.	274
															gct	274
20	nıa	Asn	110	Leu	25	Sei	uly	ч	ulu		1111	шту	Ala	Sei		
20					23					30					35	
acc	cat	gga	aca	aaa	ast	acc	2++	200	cat	aas	2++	aas	g a g	σc+	at a	322
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МІА	1113	Gly	nia	40	veh	nia	116	SEI		ч	116	шту	aru		Val	
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~~~	000	aaa	act	222	goo.	<b>400</b>	<b>400</b>	0.00	<b>t</b> o <b>t</b>	~~~	ata	000	20+	~~~	a t a	270
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ыу	GIN	Gly	піѕ	ч	ulu	GIU		uly	ser	inr	Leu		ч	ser	Arg	
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Tyr Glu Thr	Asn Ala Gin G	ily Ala Val Ala	Gln Pro Gly Tyr	Gly Thr
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Ser Ser Lys Asn Tyr Tyr Asn Asn Gin Gin Val Asn Pro Thr Tyr Asn	
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Trp Gln Tyr Tyr Thr Lys Thr Thr Ala Lys Ala Gly Val Thr Pro Ser	
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Phe Trp	
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Glu Ala Val Gly Gln Gly Ala Lys Glu Ala Ala Ser Ser Gly He Gln
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Asn Ala Leu Gly Gln Gly His Gly Glu Glu Gly Gly Ser Thr Leu Met

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Gly Ser Arg Gly Asp Val Phe Glu His Arg Leu Gly Glu Ala Ala Arg
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lle Arg Gin Gly Val Asp Ala Val His Asn Ala Gly Ser Trp Gly Thr
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Ser Gly Gly His Gly Ala Tyr Gly Ser Gln Gly Gly Ala Gly Val Gln
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Gly Thr Asn Ser Leu Gly Gly Ser Val Gly Gln Gly Gly Asn Gly Gly
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170
175

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370 375 380

Asn Phe Trp Glu Asn Leu Lys Ser Lys Thr Arg Phe IIe Asn Trp Asp 385 390 395 400

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440
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65 70 75													
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Val Gin Pro Gly Leu Leu Gin Trp Val Lys Phe Trp													
80 85													
gcaaccacca ccgaggcccc gaaaagcact ggtcgtcagg gagctcctcc ccttggcccc 352	2												
	-												
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	-												
ttgtctctcc ttgtttcttc ccactgcact gtggtgcttc agtggccacc agcctcgtca 472	)												
- 0 about of the state of the st	_												

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Gly	Ser	Gly	Glu 20	Ala	Gly	Pro	Leu	GIn 25	Ser	Gly	Glu	Glu	Ser 30	Thr	Gly	
			ggg Gly							/.	_			_		321
****	ASII	35	ury	u i u	Λια	200	40	1110	uly	LOU	uly	45	ΛΙΔ	Lou	001	
			gga Gly						/			_				369
uiu	50	vai	ury	Lys	Ala	55	uly	Lyo	Q10	ΛIα	60	uly	Ala	Ala	чту	
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Ser 65	Lys	Val	Ser	Glu	70	Leu	GIY	Gin	Gly	75	Arg	Glu	Ala	Val	80	
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105

110

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ΠÞ	ury		uly	uly	NOII	uly		110	110	VOII	1116		1111	ASII	1111	
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	agc	acc	cga	gcc	ctc	ctc	tac	ttc	agc	cga	ctc	tgg	gag	gat	ttc	aaa	1377
	Ser	Thr	Arg	Ala	Leu	Leu	Tyr	Phe	Ser	Arg	Leu	Trp	Glu	Asp	Phe	Lys	
	385					390					395					400	
	0	000	00±	00+	++-	o+-	000	+~~	000	~~~	<b>~+</b> +	<b>~+</b> +	~~~	مله بيدر بيدر	<b>G</b>	<b>***</b>	1405
				_		_	aac Asn	_									1425
	_,''	!!						٠. ٢	-, J	4	, , ,	. , 🐱	_ ; •	- 1 5		·	

410

405

<212> PRT

<213> Homo sapiens

gcg tca tca ctg cag aaa cgt gca ggc aga gcc gat cag aac tac aat	1473
Ala Ser Ser Leu Gin Lys Arg Ala Gly Arg Ala Asp Gin Asn Tyr Asn	
420 . 425 430	
tac aac cag cat gcg tat ccc act gcc tat ggt ggg aag tac tca gtc	1521
Tyr Asn Gln His Ala Tyr Pro Thr Ala Tyr Gly Gly Lys Tyr Ser Val	
435 440 445	
aag acc cct gca aag ggg gga gtc tca cct tct tcc tcg gct tcc cgg	1569
Lys Thr Pro Ala Lys Gly Gly Val Ser Pro Ser Ser Ser Ala Ser Arg	
450 455 460	
gtg caa cct ggc ctg ctg cag tgg gtg aag ttt tgg tag gcaatttctt	1618
Val Gin Pro Gly Leu Leu Gin Trp Val Lys Phe Trp	
465 470 475	
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catacaccag catcttctg tacctcctcc ctttggtgac ctgaagtcac tgtgacagtt	1858
	4.4.4
ctccaggaag gaggagcttc ctacttttga gtttctctgt ggaaataaaa catgaatctt	1918
	1070
gtttccctaa aaaaaaaaa aaaaaaaaaa aaaaaaaaa	1978
	1000
aaaa	1982
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	-	u	u			0

Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys Leu

1 10 15

Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser Thr Gly
20 25 30

Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp Ala Leu Ser 35 40 45

Glu Gly Val Gly Lys Ala lle Gly Lys Glu Ala Gly Gly Ala Ala Gly
50 55 60

Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr Arg Glu Ala Val Gly

75
80

Thr Gly Val Arg Gln Val Pro Gly Phe Gly Ala Ala Asp Ala Leu Gly 85 90 95

Asn Arg Val Gly Glu Ala Ala His Ala Leu Gly Asn Thr Gly His Glu
100 105 110

lle Gly Arg Gln Ala Glu Asp Val lle Arg His Gly Ala Asp Ala Val
115 120 125

Arg Gly Ser Trp Gln Gly Val Pro Gly His Asn Gly Ala Trp Glu Thr
130 135 140

Ser Gly Gly His Gly Ile Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln
145 150 155 160

Gly Gln Gly Asn Pro Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr
165 170 175

Pro Gly Asn Ser Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro 180 185 190

Trp	Gly	Gln	Gly	Gly	Asn	Gly	Gly	Pro	Pro	Asn	Phe	Gly	Thr	Asn	Thr
		195					200					205			

- Gin Gly Ala Val Ala Gin Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn 210 215 220
- Gln Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly 225 230 235 240
- Ser Ser Asn Ser Gly Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser Gly
  245
  250
  255
- Ser Gly Ser Asn Gly Asp Asn Asn Gly Ser Ser Ser Gly Gly Ser 260 265 270
- Ser Ser Gly Ser Ser Gly Gly Ser Ser Gly Gly Ser Ser Gly Gly Gly 275 280 285
- Ser Ser Gly Asn Ser Gly Gly Ser Arg Gly Asp Ser Gly Ser Glu Ser 290 295 300
- Ser Trp Gly Ser Ser Thr Gly Ser Ser Ser Gly Asn His Gly Gly Ser 305 310 315 320
- Gly Gly Asn Gly His Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu
  325 330 335
- Ala Arg Gly Ser Gly Glu Ser Gly Ile Gln Asn Ser Glu Thr Ser Pro 340 345 350
- Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser Lys Leu 355 360 365
- Gly Phe lie Asn Trp Asp Ala lie Asn Lys Asn Gln Val Pro Pro Pro 370 380

Ser Thr Arg Ala Leu Leu Tyr Phe Ser Arg Leu Trp Glu Asp Phe Lys 385 390 395 400

GIn Asn Thr Pro Phe Leu Asn Trp Lys Ala IIe IIe Glu Gly Ala Asp 405 410 415

Ala Ser Ser Leu Gin Lys Arg Ala Giy Arg Ala Asp Gin Asn Tyr Asn 420 425 430

Tyr Asn Gln His Ala Tyr Pro Thr Ala Tyr Gly Gly Lys Tyr Ser Val 435 440 445

Lys Thr Pro Ala Lys Gly Gly Val Ser Pro Ser Ser Ser Ala Ser Arg
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460

Val Gln Pro Gly Leu Leu Gln Trp Val Lys Phe Trp
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**<211> 21** 

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<220>

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gtcgac	gcca ccatgaagat cccggtcctt cctgcc	36
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<b>(</b> 2.2.2)		
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catgccccat ctcccagc
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(400)		
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<b>&lt;223&gt;</b>	an artificially synthesized primer sequence	

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15

1

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- Gin Lys Arg Ala Gly Gly Ala Asp Gin Phe Ser Lys Pro Glu Ala Arg
  35 40 45
- Gin Asp Leu Ser Ala Asp Ser Ser Lys Asn Tyr Tyr Asn Asn Gin Gin 50 55 60
- Val Asn Pro Thr Tyr Asn Trp Gln Tyr Tyr Thr Lys Thr Thr Ala Lys
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- Ala Gly Val Thr Pro Ser Ser Ser Ser Ala Ser Arg Ala Gln Pro Gly 85 90 95

Leu Leu Lys Trp Leu Lys Phe Trp
100